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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,939	05/03/2001	Toshiki Taru	50212-207	5356

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MCDERMOTT WILL & EMERY  
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WASHINGTON, DC 20005-3096

EXAMINER
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HOFFMANN, JOHN M

ART UNIT	PAPER NUMBER
1731	

DATE MAILED: 09/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/830,939	TARU ET AL.
	Examiner	Art Unit
	John Hoffmann	1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 28 July 2003.

2a) This action is **FINAL**.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-7, 9-16 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-2,5-7 and 14-16 is/are rejected.

7) Claim(s) 3-4 and 9-13 is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a)  The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____.
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.	6) <input type="checkbox"/> Other: _____.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

+16  
Claims 1-2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 09-002832 in view of JP 6-199536 and its partial translation.

JP 09-002832 discloses a method and apparatus for drawing optical fibers comprising setting an optical fiber preform in a furnace core tube (14) having an upper chamber (24) and drawing the heated preform into an optical fiber wherein the upper portion of the chamber (24) is provided with an auxiliary heater. JP 09-002832 discloses that "on the verge of the completion of the fiber drawing work of the preform ... the temperature ... is lowered". Instant claims 1 and 7 differ in that a cooling means is additionally provided for cooling the upper chamber. JP 09-002832 also shows the steps of measuring and controlling the temperature by means of a sensor and regulator 35.

JP 6-199536 discloses a related process and apparatus for drawing optical fibers comprising setting an optical fiber preform in a furnace having a drawing chamber (A) and an upper chamber (B) and drawing the heated preform into an optical fiber wherein the preform is forcedly cooled by gaseous nitrogen supply system 29. It would have been obvious to enhance the temperature lowering step of JP 09-002832 by including a cooling means as disclosed by JP 6-199536.

Applicant's response has been reviewed; however, it is not persuasive for the following reasons. The substance of the submitted arguments is directed to the

teachings of JP 6-199536 and particularly the translation of par. 27 as kindly presented by applicant. Applicant should note however that JP 6-199536 was not cited as an anticipation the claims. The teachings of JP 09-002832 and JP 6-199536 have been cited in combination and applicant has not persuasively traversed or shown error in the stated rejection. JP 09-002832 disclose a temperature lowering step and there is motivation to enhance this temperature lowering step with the cooling means of JP 6-199536 since it would be expected by one of ordinary skill in the art that temperature lowering would readily be accomplished with a cooling means.

Claims 5-6 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 09-002832 in view of JP 6-199536 as applied to claims 1, 2 and 7 above, and further in view of Kubo et al.

The prior art is replete with the application of external coolants air and water around and/or in walls of chambers for the purpose of cooling. As evidence of this prior art, Kubo et al is cited as disclosing air or water coolants including a circulation system for cooling a glass molding apparatus. Also note the Figs and element 33. It would have been obvious when considering the teachings of the references discussed above and especially the teaching of lowering the temperature as set forth by JP 09-002832 to use art recognized means (water and air) to accomplish the objective of cooling. It does not appear that applicant has presented additional arguments in regards to this rejection.

Applicant has maintained that the examiner has improperly relied on JP 6-199536 because an English language translation was not supplied. The examiner has

made a request to the translation branch of STIC for an English language translation of JP 6-199536 as well as a request for an English language translation of JP 09-002832. Copies of these translations will be faxed to applicant when received by the examiner in order to resolve any further issues regarding these references.

### ***Allowable Subject Matter***

Claims 3-5 and 9-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Response to Arguments***

Applicant's arguments filed 28 July 2003 have been fully considered but they are not persuasive.

It is argued that J'832 does not disclose a cooling step. To one of ordinary skill, this would have been typically true. However, Applicant can be their own lexicographer. Presently, the specification sets forth what is encompassed by "cooling". The "Best Mode" portion of the specification, Applicant sets forth that the invention encompasses "natural air cooling" (see the sentence spanning page 19-20 of the present specification). One of ordinary skill would realize that the '832 invention has inherent natural air cooling. Since Applicant is using a very broad scope for "cooling" the prior

art must be interpreted by the same broad scope. To put it another way: Applicant has failed to point out how the cooling of '832 fails to read on the cooling of the claims.

Applicant's invention is directed to keeping the container within the range of 400-700C (page 25, lines 1-6). '832 teaches the same thing, but with a broader range (100-700C).

It is further argued that '832 does not teach a temperature lowering step. First it is noted that the claims do not require a temperature lowering step. Second, it is clear that if the temperature ever got above the claimed range, one would then have to lower the temperature so as to keep with the teachings of '832. Third, it would have been inherent that one would lower the temperature at the end of the process, because one would shut off the furnace when the process is done. Fourth, the English abstract clearly states "the upper chamber 24 is lowered to 100" degrees. Last, Paragraph 0027 of the PTO translation refers to the temperature going below 100 C: this is a lowering of the temperature.

As Applicant argues on page 6, lines 10-12 of the Response (28 July 2003) J'832 uses on/off control to energize the heater: when the heater is off, the furnace would inherently cool.

It is further argued that the Office has not pointed out where the cooling is "positively performed". Examiner is unsure what is meant by positively performed cooling, but since the claims don't appear to require it, the prior art does not need to show it.

Further it is argued on the bottom of that page 6 that JP '832 has an "undesirable cooling". The claims do not preclude cooling which is undesirable. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. Neither desirability nor undesirability results in any manipulative difference. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

As to the argument that a step of cooling is inconsistent with the objectives of '832. This is not completely accurate. However, Applicant appears to be ignoring one of the objectives of '832: keeping the temperature below 700 C. One of ordinary skill would realize that keeping the tube cool enough is just as important as keeping the tube hot enough. Outside that range would make the invention inoperable. Adding a cooling means to structure that could over heat is generally not an inventive concept.

Applicant's have not disclosed any new AND unexpected result for adding a cooling means/ cooling step.

As to the argument that one could not put the '536 structure into '832 structure, is probably true - but the relevance is not understood. It is not the structure of '536 that is relied upon, rather the notion of using a cooling device is well known.

### ***Conclusion***

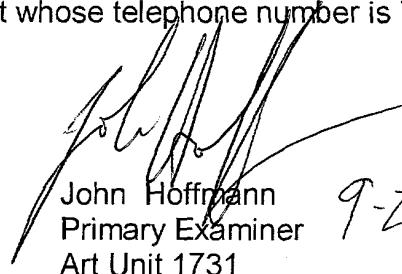
**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is 703-308-0469. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 703-308-1164. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.



John Hoffmann  
Primary Examiner  
Art Unit 1731

9-29-03

Jmh